

March-26-15 1:41:18 PM

Page 1

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setups									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 131091

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131091

Page 2

Item ID: D2665-2 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, RH, Fwd,Aft, Out
 Start Date: 3/16/15 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 3/26/15 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		<i>L.A</i> 15/05/03		<u>2</u>	<u>0</u>		DAS 08 9.89
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				<u>2</u>	<u>0</u>		JM15-5-6
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M131545</i> Memo START TIME: <u>10:10</u> FINISH TIME: <u>10:40</u> OVEN TEMPERATURE: <u>325°</u>	0.00 0.00				<u>2</u>	<u>0</u>	<u>15.5.12</u>	DAS 34 9.89

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Doc/Data									
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Handling/Pre									
Material									
Operator									
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Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
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☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other	
--	--	--

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131091

Page 3

Accept

N9000401 00

Setup Start *NS1*

Stop *NS2*

Start Date: 3/16/15 **Start Qty:** 2.00

~

Cust Item ID:

Required Date: 3/26/15 **Req'd Qty:** 2.00

?

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

[illegible]

MCS MAY 14 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Picklist Print

March-26-15 1:41:18 PM

Page 1

Work Order ID: 131091

131091

Parent Item: D2665-2

D2665-2

Parent Item Name: Saddle, RH, Fwd,Aft, Out

Start Date: 3/16/15

Required Date: 3/26/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP: C 00.11.01 Removed P/O for Powder Coat - in house process
EC
IPP Rev:D As per Rev D 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-003		Manufactured	No			100	Each	21.0000	1	2			

D6101-003

Saddle Billet, 7075

21551

Location

Loc Qty

Loc Code

MAT044

21

120394

9

128906

2

129920

10

2

DQA: _____ Date: _____



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DART AEROSPACE LTD		Work Order: 131091
Description: 206 Saddle, Outboard, Right side		Part Number: D2665-2
Inspection Dwg: D2665 Rev: D DSK: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

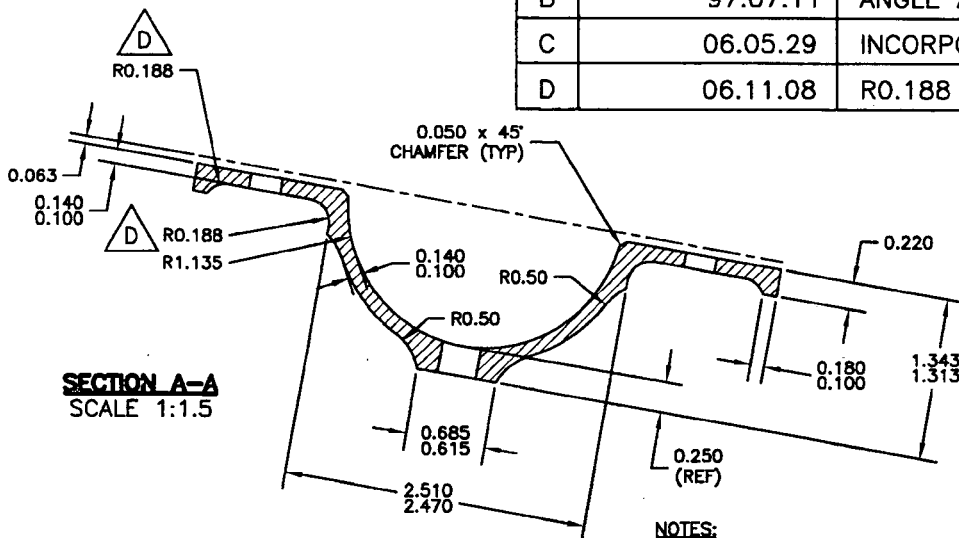
				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
A	0.100	0.140		120	120			
B	0.100	0.140		123	123			
C	1.125	1.145		1.135	1.135			
D	0.615	0.685		685	685			
E	0.240	0.260		249	248			
F	1.313	1.343		1.325	1.324			
G	0.210	0.230		220	220			
H	0.100	0.180		140	140			
I	2.470	2.510		2.495	2.495			
J	1.565	1.585		1.574	1.575			
K	0.235	0.240		239	238			
L	0.100	0.120		114	117			
M	0.990	1.010		1.001	1.002			
N	0.510	0.515		512	512			
O	5.990	6.010		6.001	6.001			
P	1.245	1.255		1.250	1.250			
Q	2.495	2.505		2.500	2.500			
R	0.312	0.318		314	314			
S	0.315	0.322		316	316			
T	2.495	2.505		2.500	2.500			
U	1.357	1.367		1.362	1.362			
V	0.787	0.807		796	796			
W	0.540	0.560		550	550			
X	1.674	1.684		1.679	1.679			
Y	0.256	0.262		258	258			
Z	0.912	0.932		922	922			
AA	0.490	0.510		500	497			
AB	0.178	0.198		188	188			
AC								
AD								
AE								
Accept/Reject								

Measured by: S	Date: 15-5
Audited by: B.A. DAS	Date: 15/05/03
Prototype Approval: 08	Date:
9-89	

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	99.04.19	Incorporated DSI 9095, DSI 9102 & DSI 9122 Rev. A	RF	
C	99.11.10	Added Dim. R-T	RF	
D	02.12.12	Reformat; Added Dim. U-W & DT8683, DT8686	KJ/RF	
E	06.07.05	Revised per drawing revision C	KJ/JLM	
F	07.03.21	Revised per drawing revision D	KJ/JLM	
G	12.03.08	Dimension R and Y revised	KJ	



DESIGN	<i>PH</i>	DRAWN BY	<i>CB</i>	DART AEROSPACE USA, INC.
				PORT HADLOCK, WA
CHECKED	<i>PH</i>	APPROVED	<i>PH</i>	DRAWING NO. D2665
				REV. D SHEET 1 OF 1
DATE	06.11.08	TITLE	SADDLE FWD OUTSIDE HIGH	SCALE 1:3
A	97.03.25	NEW ISSUE		
B	97.07.11	ANGLE AND NOTES ADDED		
C	06.05.29	INCORPORATE DEO 9122, 9102, 9095		
D	06.11.08	R0.188 WAS R0.30; Ø0.316 WAS Ø0.313		

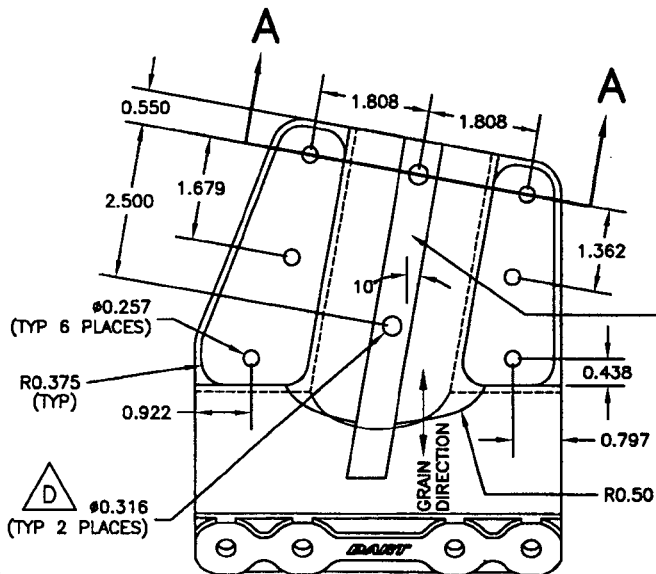


RELEASED

07.02.12

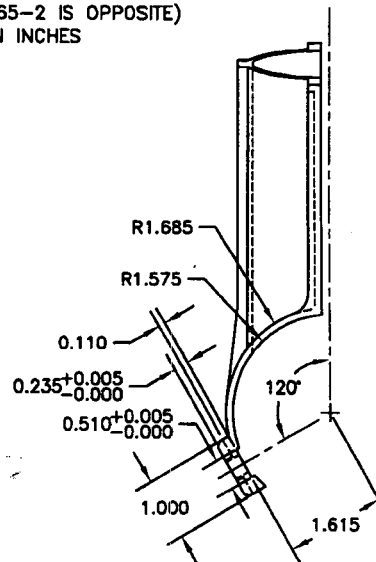
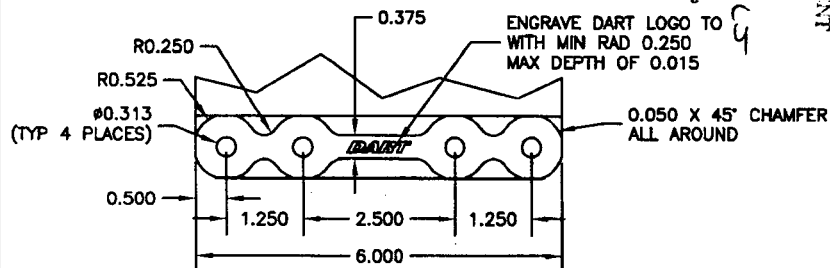
NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
(MAKE FROM D6101-003 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 5) D2665-1 SHOWN (D2665-2 IS OPPOSITE)
- 6) ALL DIMENSIONS ARE IN INCHES



ENGRAVE PART
NUMBER AND
BATCH NUMBER
TO MAX DEPTH
OF 0.010 WITH
MIN RADIUS
OF 0.010

131091MCS
150330



D2665-1 SADDLE FWD OUTSIDE HIGH

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Part Number: D2665-2	Rev: D	- Page 1 -
Description: SADDLE FWD OUTSIDE I	Inspection Dwg: D2665	Work Order: 131091

Name	Nominal	Upper Tol Lower Tol	No. Piece_1 Actual	No. Piece_2 Actual			
A Distance ZX	0.120	0.020 -0.020	0.123	0.123			
B	0.120	0.020 -0.020	0.123	0.123			
C	1.135	0.010 -0.010	1.135	1.135			
D	0.650	0.035 -0.035	0.685	0.685			
D	0.250	0.010 -0.010	0.248	0.249			
F	1.328	0.015 -0.015	1.324	1.325			
G Distance ZX	0.220	0.010 -0.010	0.221	0.222			
H	0.140	0.040 -0.040	0.140	0.140			
I Distance XY	2.490	0.020 -0.020	2.496	2.496			
J	1.575	0.010 -0.010	1.575	1.574			
K	0.235	0.005 0.000	0.238	0.239			
L	0.110	0.010 -0.010	0.117	0.114			
M	1.000	0.010 -0.010	1.002	1.001			
N	0.510	0.005 0.000	0.512	0.512			
O Distance XY	6.000	0.010 -0.010	5.999	6.000			
P Distance XY	1.250	0.005 -0.005	1.250	1.250			
Q Distance XY	2.500	0.005 -0.005	2.500	2.500			

Measured by:
Mathieu Lamarche

Date:
2015-5-6

Audited by:

Date:



Part Number: D2665-2	Rev: D	- Page 2 -
Description: SADDLE FWD OUTSIDE I	Inspection Dwg: D2665	Work Order: 131091

Name	Nominal	Upper Tol Lower Tol	No. Piece_1 Actual	No. Piece_2 Actual			
R Diameter	0.313	0.005 -0.001	0.313	0.314			
S Diameter	0.316	0.006 -0.001	0.316	0.316			
T Distance XY	2.500	0.005 -0.005	2.499	2.500			
U Distance XY	1.362	0.005 -0.005	1.362	1.362			
V Distance XY	0.797	0.010 -0.010	0.797	0.796			
W Distance XY	0.550	0.010 -0.010	0.553	0.552			
X Distance XY	1.679	0.005 -0.005	1.680	1.680			
Y Diameter	0.257	0.005 -0.001	0.258	0.258			
Z Distance XY	0.922	0.010 -0.010	0.924	0.925			
AA Distance XY	0.500	0.010 -0.010	0.500	0.497			
AB Radius	0.188	0.010 -0.010	0.192	0.191			

Measured by:
Mathieu Lamarche

Date:
2015-5-6

Audited by:

Date: